## Garant

# GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, Ø e8 DC: 4mm



#### Order data

| Order number | 205250 4      |
|--------------|---------------|
| GTIN         | 4062406122195 |
| Item class   | 11X           |

#### Description

**Version:** For roughing. Special profile for machining non-ferrous metals.

#### Advantage:

Optimised flute form, eccentric relief ground, generous chip spaces.

Up to 2  $\times$  D into solid material at very high feed rates and smooth cutting action. Ramping capability up to 45°.

Very high feed rates when plunging vertically, thanks to **special plunging geometry**.

#### **Technical description**

| Balance quality with shank                              | G 2.5 with HA |
|---|---------------|
| Shank Ø D <sub>s</sub>                                  | 6 mm          |
| Flute length $L_c$                                      | 8 mm          |
| Overall length L  | 57 mm         |
| Helix angle   | 35 degrees    |
| No. of teeth Z  | 3             |
| Feed $f_z$ for slot milling in short-chipping aluminium | 0.04 mm       |
| Cutting edge Ø D <sub>c</sub> 4 mm                      |               |
| Tolerance nominal Ø                                     | e8            |

| Shank   | DIN 6535 HA to h6                |  |
|---|----------------------------------|--|
| Direction of infeed                                     | horizontal, oblique and vertical |  |
| Feed $f_z$ for side milling in short-chipping aluminium | 0.06 mm                          |  |
| Corner rounding r <sub>v</sub>                          | 0.1 mm                           |  |
| Series  | Master Alu                       |  |
| Coating   | DLC                              |  |
| Tool material   | Solid carbide                    |  |
| Standard  | DIN 6527                         |  |
| Milling profile   | WR                               |  |
| Helix angle characteristic                              | unequal spacing                  |  |
| Spacing of the cutters                                  | unequal spacing                  |  |
| Cutting width $a_e$ for milling operation               | 0.4×D for side milling           |  |
| Cutting width $a_e$ for milling operation               | Full slot cutting depth 1×D      |  |
| Through-coolant   | no                               |  |
| Machining strategy                                      | HPC                              |  |
| Colour ring   | yellow                           |  |
| Type of product   | End / face mill                  |  |

### User data

|                               | Suitability                               | V <sub>c</sub> | ISO code |
|-------------------------------|---|----------------|----------|
| Aluminium                     | Suitable                                  | 450 m/min      | Ν        |
| Aluminium (short<br>chipping) | suitable                                  | 400 m/min      | Ν        |
| Alu > 10% Si                  | suitable                                  | 380 m/min      | Ν        |
| PA 66                         | suitable only under restricted conditions | 120 m/min      | Ν        |
| PEEK                          | suitable only under restricted conditions | 100 m/min      | Ν        |
| Cu                            | Suitable                                  | 160 m/min      | Ν        |
| CuZn                          | Suitable                                  | 200 m/min      | Ν        |

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| wet maximum     | suitable                                  |  |
|-----------------|---|--|
| wet minimum     | suitable only under restricted conditions |  |
| dry             | suitable only under restricted conditions |  |
| Air<br>Services | suitable                                  |  |

Shank grinding Type HB

129100 HB